

## II. CLAIM AMENDMENTS

1. (Currently Amended) A method of ciphering data transmission in a radio system, comprising:

generating a ciphering key;

producing a ciphering mask in a ciphering algorithm using the ciphering key as an input parameter;

producing ciphering data by applying the ciphering mask to plain data;

using a logical channel specific parameter or a transport channel specific parameter as an additional input parameter to the ciphering algorithm,

wherein the logical channel specific parameter <sup>is</sup> ~~is~~ one of the following: a Radio Access Bearer Identifier, a Logical Channel Identifier, a Signaling Link Identifier.

2. (Original) The method as claimed in claim 1, further comprising: